

REMARKS

The application has been reviewed in light of the Final Office Action mailed on March 17, 2008. A request for continued examination is filed concurrently. Claims 1-26 are currently pending in the application, with Claims 1, 9, 15, 20 and 25 being in independent form. Claims 1, 2, 8-10, 14-16, 19-21 and 24-26 have been amended, Claims 7, 13, 18 and 23 have been cancelled, and new Claims 29-33 have been added. Support for the amendments can be found in the specification and the drawings. It is believed that no new subject matter has been added.

Rejection of Claims 1-26 under 35 U.S.C. § 103

Claims 1-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshida (EP 0 335 656 A1) in view of Kirkpatrick (US Patent No. 4,958,064).

Yoshida is directed to an automatic focus control apparatus particularly suitable for use in auto-focus television cameras as stated throughout the written description of Yoshida. The apparatus described by Yoshida comprises zoom lens 2; image pick-up means (i.e., image pick-up element 3, pre-amplifying circuit 4, signal processing circuit 5, and matrix circuit 6) for picking up an image of an object by means of zoom lens 2; amplitude value detecting means (i.e., band-pass filter circuits 7A, 7B, 7C, detecting circuits 8A, 8B, and 8C, selector switch 9 and A/D converter 12) for detecting the amplitude value of the color signals SB, SG and SR derived from the image pick-up means; and auto-focus control circuit 10. See column 3, lines 51-60 and FIG. 2. The auto-focus control circuit 10 forms a focus position information detecting means that detects focus position information to pick-up the object by means of the zoom lens 2, and by comparing the detected results of the normalized amplitude values of the respective color signals SB, SG and SR. See column 5, lines 43-51.

Kirkpatrick is directed to a bar code locator and reading system. In particular, Kirkpatrick is directed to a system for locating and reading bar codes on movable objects.

Yoshida and Kirkpatrick fail to disclose or suggest “a signal processor comprising means for performing an analysis utilizing principles of axial chromatic aberration and a **value** indicative of the parameter of a **single** wavelength component of the at least one wavelength component associated with a **single** data signal of the at least one data signal representing one of the colors, and means for determining an amount of movement of said at least one lens for adjusting a focus quality of an image corresponding to said optical code and impinged onto said image sensor, such that said amount of movement is determined based on the analysis,” as recited by Claim 1 (emphasis added). Yoshida, on the contrary, uses **multiple values** related to **at least two data signals** for comparison thereof for performing the analysis utilizing principles of axial chromatic aberration and for the focus quality adjusting. Kirkpatrick does not cure the deficiency of Yoshida. Claims 9, 15, 20 and 25 recite similar limitations as those recited by Claim 1. Therefore, reconsideration and withdrawal of the rejection is respectfully requested and allowance of independent Claims 1, 9, 15, 20 and 25 are earnestly solicited.

Claims 7, 13, 18 and 23 have been cancelled. Dependent Claims 1-6, 8, 10-12, 14, 16-17, 19, 21-22, 24 and 26 depend directly or indirectly from independent Claims 1, 9, 15, 20 and 25, and are therefore patentable for at least the reasons given above for independent Claims 1, 9, 15, 20 and 25. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested and allowance of the dependent claims is earnestly solicited.

New Claims 29-33

New Claims recites, “first determining the amount of movement to be a minute movement and selecting a first direction of movement; determining a new difference between a

new value associated with imaging the optical code after the at least one lens was moved along the optical axis by the minute amount in the first direction; comparing the previously determined difference between said value and the stored value to the new determined difference; when the new determined difference is bigger than the previously determined difference, determining that the direction of movement from the original position of the at least one lens is the second direction; and when the new determined difference is smaller than the previously determined difference, determining the direction of movement from the original position of the at least one lens is the first direction.”

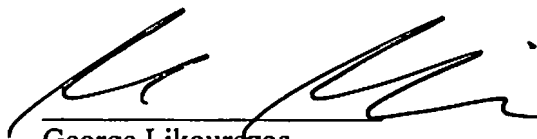
Yoshida teaches away from the steps recited in Applicants’ Claim 29. Yoshida describes a prior method in which the lens is wobbled around the properly-focused position, causing the image to also wobble and be deteriorated. Since Yoshida primarily teaches a television camera, it is important that deterioration of the image not be conspicuous to a viewer. However, Applicants’ Claim 29 is directed to a barcode scanner in which the at least one lens is moved a minute amount in a direction which might cause the focus to deteriorate, only after which the focus is corrected. Since the application is to decode the imaged optical code, any deterioration of the image while focusing is incidental and not of great importance, as there is no human viewer that might detect deterioration of the image or to whom it might be conspicuous. Claims 30-33 include similar limitations as those recited in Claim 29. Claims 29-33 depend from Claims 1, 9, 15, 20 and 25. For at least the reasons provided above with respect to independent Claims 1, 9, 15, 20 and 25, and the reasons provided above with respect to dependent Claims 29-33, allowance of dependent Claims 29-33, etc. is respectfully requested.

Conclusion

In view of the foregoing remarks, it is respectfully submitted that all claims now pending in this application, namely, Claims 1-6, 8-12, 14-17, 19-22, 24-26 and 29-33 are in condition for allowance. Accordingly, early and favorable consideration of this application is respectfully requested.

Should the Examiner believe that a telephone or personal interview may facilitate resolution of any remaining matters, he is respectfully requested to contact Applicants' undersigned attorney at the telephone number indicated below.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'G. Likourezos', is written over a horizontal line.

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